



STATE OF NORTH CAROLINA
DEPARTMENT OF TRANSPORTATION

The Access Management Preliminary Review Procedure

NCDOT Traffic Engineering Conference
for Operations and Safety

August 24, 2006

By Access Review Engineer Michael P. Reese, P.E.

THE BIG GAME!

NCDOT Traffic Engineering Branch *

THE TEAM

Opposing teams?

One team!

NCDOT Traffic Engineering Branch • Access Management Group

OUR FIELD

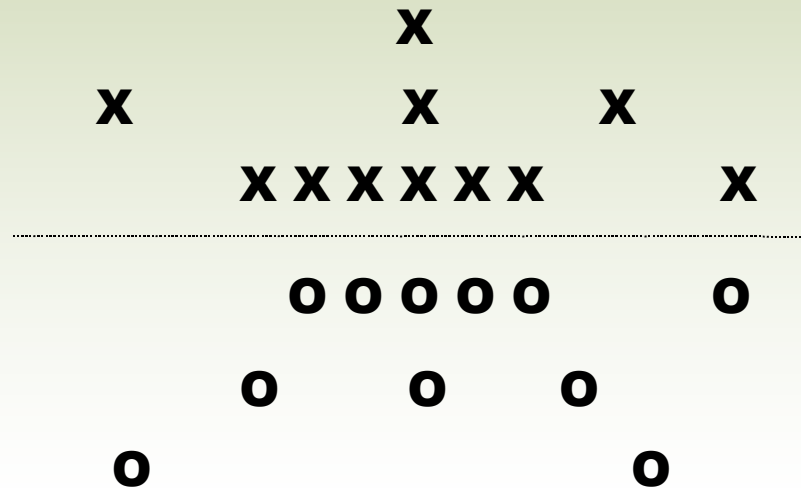


NCDOT Traffic Engineering Branch • Access Management Group

Our Procedure/Playbook

1) Gather Background Data

- Aerials
- TIP Information
- C/A Limits
- Median Breaks
- Signal Plans
- Thoroughfare Plans
- AADT



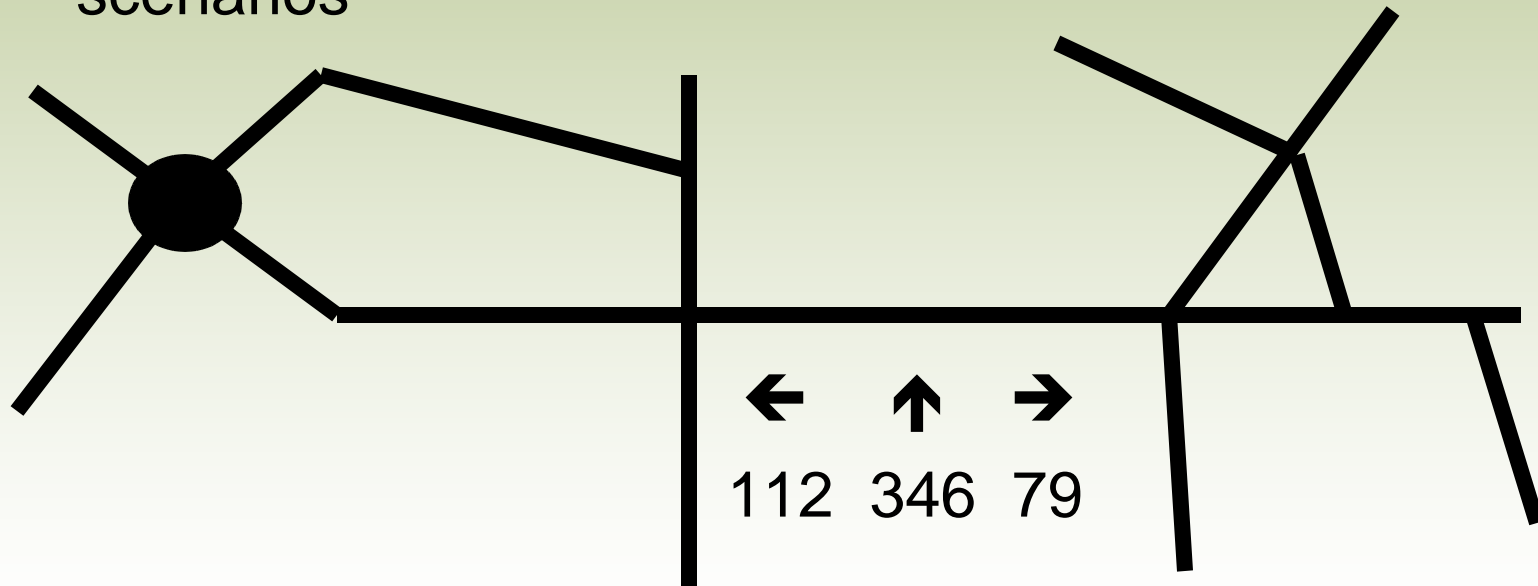
THE VOLUME ALGORITHM!

NCDOT Traffic Engineering Branch *

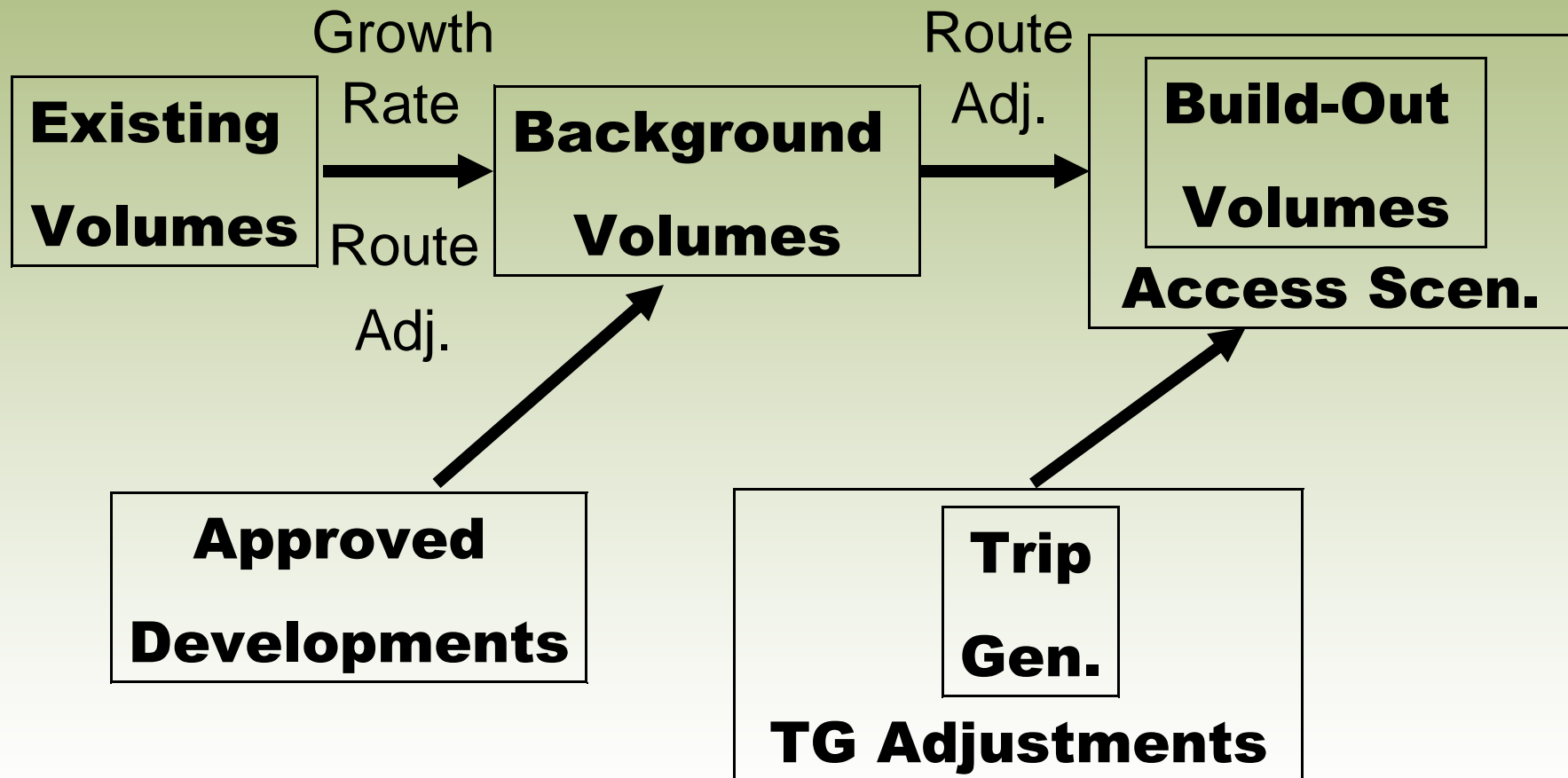
Our Procedure/Playbook

2) Check Volume Algorithm

- Verify procedures, formulas, and calculations used to determine volumes across all scenarios



2) Check Volume Algorithm



Our Procedure/Playbook

3) Screen Synchro Data

- Compare Synchro analysis files received to the Capacity Analysis Guidelines
- Seek justification of discrepancies

3) Screen Synchro Data

NCDOT Intersection Analysis Software!

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations	1	1	1	1	1	1	1	1	1	1	2	1
Ideal Flow (vohpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900

SC-2004-085		12/9/2004														
2008 PM Combined Response to Comments																
Ideal Flow	Total Lost Time	Right Turn On Red	Peak Hour Factor	TurnType Validation	Left Turn Protection	Minimum Initial	Yellow Time	Red Time	Lead/Lag	Recall Mode	v/c Ratio	Movement(LOS/Del)	Approach	Queue Length 95	Overall	
NC 55 & US 6																
OK	OK	X	OK	X	OK	X	OK	OK	X	OK	OK	OK	OK	X	OK	
NC 55 & US 444																
OK	OK	OK	OK	X	OK	X	OK	OK	OK	X	OK	OK	OK	X	OK	
Main & South																
OK	OK	OK	OK	OK	OK	X	OK	OK	OK	OK	OK	OK	OK	X	OK	
4th & 5th																
OK	OK	OK	OK	OK	?	X	OK	OK	OK	X	OK	OK	OK	X	OK	
Time Before Reduce (s)																
Time To Reduce (s)																

NCDOT Traffic Engineering Branch • Access Management Group

Our Procedure/Playbook

4) Perform Preliminary Engineering Review


- Read TIA
- Additional information needed?
- Compare TIA to Site Plan
- Scan Synchro and SimTraffic Analysis Files
- Check for items requiring justification/explanation

4) Perform Preliminary Engineering Review

THE PRELIMINARY REVIEW LETTER

What does it mean?

Division Engineer
Current Date: 200x
Page 2 of 2



STATE OF NORTH CAROLINA
DEPARTMENT OF TRANSPORTATION

MICHAEL F. EASLEY
GOVERNOR

LYNDO TIPPETT
SECRETARY

Current Date: 200x

Subject: Preliminary Review for the xxxSITExxx on US xx in xxxCITYxxx in xxx County

The Access Management Group has performed a preliminary review of the site plan prepared by xxx Inc. and the Traffic Impact Analysis (TIA) prepared by xxx Inc. for the subject site. The key dates regarding this development are as follows:

Date Received by This Office	xx/xx/xxxx	Date of Site Plan	xx/xx/xxxx
		Date of Sealed TIA	xx/xx/xxxx
X	We consider the Traffic Impact Analysis to substantially meet our criteria for further review and comments. This review has been added to our queue of projects to perform a more detailed review that will be submitted under separate cover at a later date.		
X	We require additional information from the TIA preparer as noted on the attached list. We are unable to perform a thorough review until we receive this information.		
X	We have concerns with the Traffic Impact Analysis. The attached list includes inconsistencies or other questionable aspects that vary from our recommended practices and require further explanation or justification. A revised TIA should be submitted before a thorough review can be completed.		

Please refer to the Driveway Manual and the Capacity Analysis Guidelines available via www.ncdot.org/doh/preconstruct/traffic/congestion/CM/ for additional information. This letter is only being distributed electronically and should be considered as the official documentation. If we can provide further assistance with this project or if you require a paper copy of this letter, please contact me or Teresa H. Becher, P.E., at (919) 250-4151.

XXX/xxx

Attachment

cc: Division Engineer (Attention: Division Traffic Engineer)
District Engineer
J. K. Lacy, P.E., C.P.M.
L. L. Cove, P.E. (Attention: J. H. Dunlop, P.E., T. H. Becher, P.E.)
PEF Sealer (XXX Inc.)

MAILING ADDRESS: TRAFFIC ENGINEERING AND SAFETY SYSTEMS BRANCH
1502 MAIL SERVICE CENTER
RALEIGH NC 27699-1502

TELEPHONE: 919-250-4151
FAX: 919-250-4195
WEBSITE: WWW.NCDOT.ORG/DOH

LOCATION: 1020 BIRCH ROSS DR.
RALEIGH NC 27610

NCDOT Traffic Engineering Branch • Access Management Group

Preliminary Review Letter

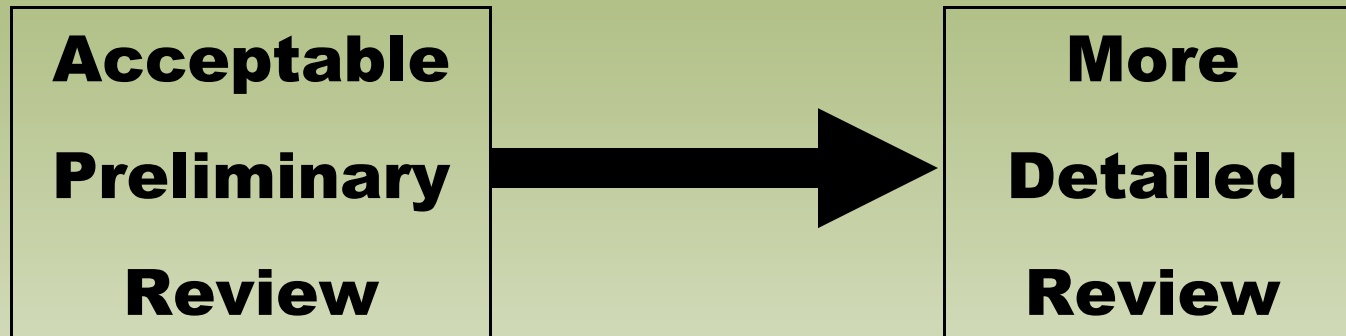
Common Requested Items

- Control of Access Break Alternatives
- Median Break Alternatives
- Volume Algorithm
- Synchro Coding
- Poor levels of service and/or excessive queuing
- Site plan and/or Synchro files

Access Management Preliminary Review Procedure

- 1) Gather Background Data
- 2) Check Volume Algorithm
- 3) Screen Synchro Data
- 4) Perform Preliminary Engineering Review

Access Management Preliminary Review Procedure



- Prelim. Review Process
- Helpful Data
- Prelim. Review Letter
- Expedites Reviews
- Promotes Better Result

Access Management Preliminary Review Procedure

The will to win is important, but the will
to prepare is vital.

-Joe Paterno

Access Management Preliminary Review Procedure

Thanks!

Michael P. Reese, P.E.

Access Review Engineer

NCDOT Congestion Management

mikereese@dot.state.nc.us

(919) 250-4151

NCDOT Traffic Engineering Branch • Access Management Group